



INSTITUTE OF PLANT BIOLOGY AND BIOTECHNOLOGY
Science Committee
Ministry of Sciences and Higher Education of the Republic of Kazakhstan

PROGRAMME

**INTERNATIONAL CONFERENCE ON PLANT BIOLOGY
AND BIOTECHNOLOGY
(ICPBB 2024)**

Best Western Plus Atakent Park Hotel

June 3-6, 2024, Almaty, Kazakhstan

Almaty, Kazakhstan, 2024

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PhD Alibek Zatybekov (IPBB, Almaty, Kazakhstan)

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Coordinator:

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Yuliya Genievskaya (IPBB, Almaty, Kazakhstan)

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Alexandr Pozharskiy (IPBB, Almaty, Kazakhstan)

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Dias Daurov (IPBB, Almaty, Kazakhstan)

Zhenis Keishilov (IPBB, Almaty, Kazakhstan)

Nazgul Rymkhanova (IPBB, Almaty, Kazakhstan)

Aisha Taskuzhina (IPBB, Almaty, Kazakhstan)

Arman Tolegen (IPBB, Almaty, Kazakhstan)

Day 1. Monday, June 03, 2024

*Best Western Plus Atakent Park Hotel, 42 Timiryazev street
Congress hall "Atakent"*

- 10.00-12.00** *Open day at the IPBB and visit to the Botanical Garden*
- 12.00-17.00** *Registration at the Hotel, hand in your presentation*
- 13.00-17.00** *Posters posting time*
- 14.00-14.30** Conference opening ceremony
- 14.30-15.00** Greetings from official Governmental organizations, veterans of science, and colleagues
- 15.00-15.30** **Kabyl Zhambakin**, General Director of the IPBB, Kazakhstan
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
PAST, PRESENT AND FUTURE OF THE IPBB
- 15.30-16.00** **Gulnara Sitpaeva**, General Director of the Institute of Botany and
Phytointroduction, Kazakhstan
Institute of Botany and Phytointroduction, Almaty Kazakhstan
ECOSYSTEM APPROACH FOR STUDYING KAZAKHSTAN PLANT
WORLD
- 16.00-16.30** *Coffee break*
- 16.30-16.50** **Yerlan Turuspekov**, Head of Molecular Genetics Lab, IPBB, Almaty,
Kazakhstan
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
SEARCH FOR MARKER-TRAIT ASSOCIATIONS IN CEREALS AND
LEGUMES AND QTN APPLICATIONS IN LOCAL BREEDING
INITIATIVES
- 16.50-17.10** **Alexey Morgounov**, Wheat breeder, Kazakhstan
TWENTY FIVE YEARS OF KAZAKHSTAN-SIBERIA NETWORK ON
SPRING WHEAT IMPROVEMENT: GERMPLASM GENETIC DIVERSITY,
ADAPTATION AND UNDERLYING GENES
- 17.10-17.30** **Srinivas Chadaram**, Senior Product Manager – Agrigenomics,
Life Sciences Solutions, Thermo Fisher Scientific
AGRISEQ – GENOTYPING BY SEQUENCING SOLUTION FOR PLANT
BREEDING PROGRAMS TO VALIDATE GENE EDITS AND ANALYZE
POLYPLOIDS & STRUCTURAL VARIANTS
- 17.30-17.45** **Ivan Bodoev**, Director of Business Development in the CIS Countries,
Sesana
SURFSEQ 5000 – THE OPTIMAL SOLUTION FOR PLANT
GENETICS
- 17.45-18.00** **Kristina Grohmann**, Sales Director
TechPrime LLP
OXFORD NANOPORE SEQUENCING: NEW OPPORTUNITIES FOR
PLANT GENOMICS
- 18.00-18.15** **Alina Korovkina**, QIAGEN, Austria
QIAGEN: MOLECULAR BIOLOGICAL METHODS IN PLANT
BIOTECHNOLOGY
- 18.15-20.00** **Welcome Reception**

Day 2. Tuesday, June 4, 2024

PLENARY SESSION

*Best Western Plus Atakent Park Hotel, 42 Timiryazev Street
Congress hall "Atakent"*

Session 1. GENETIC RESOURCES AND BIODIVERSITY

8.50-9.00 Session opening

9.00-9.30 **Andreas Börner**

*Leibniz-Institut für Pflanzengenetik und Kulturpflanzenforschung (IPK),
Gatersleben, Germany*

GENETIC RESOURCES FOR BREEDING AND RESEARCH

9.30-10.00 **Elena Khlestkina**

*N.I. Vavilov All-Russian Research Institute of Plant Genetic Resources (VIR),
Saint Petersburg, Russian Federation*

PLANT GENETIC RESOURCES IN THE CONTEXT OF GENETIC
TECHNOLOGIES

*Co-authors: Ukhatova Yu.V., Agakhanov M.M., Antonova E.V., Baymukhametova E.A.,
Börner A., Dodueva I.E., Egorova A.A., Erastenkova M.V., Evlash A.Ya., Gancheva M.S.,
Gerasimova S.V., Goncharova E.E., Gordeeva E.I., Hertig C.W., Inozemtseva A.V.,
Khatefov E.B., Kolosovskaya E.V., Korotkova A.M., Kukoeva T.V., Krylova E.A., Kuluev
B.R., Kumlehn J., Lebedeva M.A., Loskutov I.G., Lutova L.A., Mikhailova A.S.,
Mikhailova E.V., Musin K.G., Popov V.S., Putina O.V., Rakhmangulov R.S., Rozanova
I.V., Semilet T.V., Sokolova D.V., Solovieva A.V., Tikhonova N.G., Tvorogova V.E.,
Ul'yanov A.V., Shvachko N.A., Shimalina N.S., Zavarzin A.A., Zykova T.I., Shoeva O.Yu.*

10.00-10.30 **Hakan Ozkan**

Cukurova University, Adana, Turkey

A LOOK INTO TURKEY'S CEREAL GERMPLASM RESOURCES:
DIVERSITY AND APPLICATION

10.30-11.00 **Takao Komatsuda**

Shandong Academy of Agricultural Sciences (SAAS), Jinan, China Genetic
FEATURES IN PLANT DOMESTICATION

11.00-11.20 Coffee break

Session 2. GENETICS AND BREEDING

11.20-11.50 **Nicola Pecchioni**

Council for Agricultural Research and Economic, Foggia, Italy

GENOMIC TOOLS AND STRATEGIES FOR DURUM WHEAT BREEDING

11.50-12.20 **Simon Griffiths**

John Innes Centre, Norwich, UK

GENETIC STRATEGIES TO INCREASE THE NUTRITIONAL DENSITY OF
WHEAT

Session 3. PHYSIOLOGY, BIOCHEMISTRY AND BIOTECHNOLOGY

12.20-12.50 **Gustavo Slafer**

Dept. of Crop and Forest Sciences, University of Lleida, Lleida, Spain

FURTHER IMPROVING SPIKE FERTILITY TRAITS IN WHEAT TO KEEP
INCREASING YIELD POTENTIAL

Co-author: Roxana Savin

12.50-14.00 Lunch

14.00-15.00 Poster session (odd numbers)

Session 3. PHYSIOLOGY, BIOCHEMISTRY AND BIOTECHNOLOGY

15.00-15.30 **Shun Sakuma**

Tottori University, Japan

THE MUTANT POPULATION OF WILD BARLEY ACCELERATES
GENE CLONING

15.30-16.00 **Cecile Ben**

Skolkovo Institute of Science and Technology, Moscow, Russian Federation

ADDRESSING QUANTITATIVE DISEASE RESISTANCE IN LEGUMES
VIA WHOLE-GENOME ANALYSIS AND BIOTECHNOLOGY

Co-authors: Sidorov L., Boldyrev S., Baik A., Mazurier M., Sbeiti A., Djouider I.,
Fartash A., Koteletsev I., Martynova E., Samad S., Bondarenko E., Volkova P., Rickauer
M., Gentzbittel L.

Session 4. CELLULAR AND GENETIC ENGINEERING

16.00-16.30 **Allah Bakhsh**

Center for Excellence in Molecular Biology, Lahore, Pakistan

THE REGULATORY LANDSCAPE OF GENOME EDITING PLANTS
WITH FOCUS ON REGULATORY POLICIES: WHERE WE ARE
HEADING?

16.30-16.50 Coffee break

16.50-17.20 **Hiroshi Hisano**

Institute of Plant Science and Resources, Okayama University, Kurashiki, Japan

SITE-DIRECTED GENOME MODIFICATION OF GRAIN
DORMANCY GENES IN BARLEY

Session 5. GENOMICS, PROTEOMICS, AND BIOINFORMATICS

17.20-17.50 **Alan Schulman**

Natural Resources Institute Finland, Helsinki, Finland

A FAB A BEAN PAN-GENOME FOR SUSTAINABLE PROTEIN SECURITY

Co-authors: Petri Auvinen, Wei Chang, Liisa Holm, Marko Jääskeläinen, Hamid
Khazaei, Pia K. Laine, Lars Paulin, Marco Salgado, Frederick Stoddard, Jaakko
Tanskanen, Petri Törönen

17.50-18.20 **Ruslan Kalendar**

Nazarbayev University, Astana, Kazakhstan

THE ROLE OF VIRUSES IN EVOLUTION

18.20-18.50 **Laurent Gentzbittel**

Skolkovo Institute of Science and Technology, Moscow, Russian Federation

ADVANCEMENTS IN COMPUTATIONAL PIPELINES FOR
GENETIC DIVERSITY ANALYSES AND GENOMIC PREDICTIONS:
IMPLICATIONS FOR LEGUME CROP RESEARCH

Co-authors: Boldyrev S., Zamalutdinov A., Habib Y., Balapanov I., Ben C.

18.50-19.00 Closing the Plenary session (*Congress hall "Atakent"*)

Day 3. Wednesday, June 5, 2024

Sessions Day

*Best Western Plus Atakent Park Hotel, 42 Timiryazev Street
Conference hall "Khan Shatyr"*

Session 1. Genetic Resources and Biodiversity

9.00-13.00 Workshop "Biodiversity of wild flora in Central Asia"

Moderators: Shyryn Almerikova, Margarita Ishmuratova

9.00-9.20 Tatyana Ozerskaya

Federal Research Center N.I. Vavilov All-Russian Institute of Plant Genetic Resources (VIR), St. Petersburg, Russia

EXAMINATION OF PLANT RESOURCES OF CENTRAL ASIA BY VIR
EXPEDITIONS: HISTORY OF TRAVELS AND COOPERATION
Co-author: Ozerski P.V.

9.20-9.40 Akzhunis Imanbyaeva

Mangyshlak Experimental Botanical Garden, Aktau, Kazakhstan

CURRENT STATE OF FLORA OF THE MANGISTAU REGION
Co-author: Belozеров I.F.

9.40-9.55 Margarita Ishmuratova

Karaganda Buketov University, Karaganda, Kazakhstan

ASSESSMENT OF SPECIES COMPOSITION OF FRUIT AND BERRY
PLANTS OF CENTRAL KAZAKHSTAN FLORA
Co-authors: Madieva A.N., Zhanayeva M.B., Tleukenova S.U.

9.55-10.10 Ozodbek Abduraimov

Institute of Botany of the Academy of Sciences of the Republic of Uzbekistan
WILD RELATIVE CULTURAL PLANTS FLORA OF UZBEKISTAN
Co-author: Shomurodov H.F.

10.10-10.25 Gulbaira Sazykulova

Kyrgyz State University named after I. Arbaev, Bishkek, Kyrgyzstan

RESEARCH OF PROMISING SPECIES OF ESSENTIAL OIL PLANTS OF
THE ISSYK-KUL BASIN
Co-authors: Sodombekov I.S., Ashymbaeva B.A.

10.25-10.40 Dilarom Tajetdinova

Institute of Botany, Academy of Sciences of the Republic of Uzbekistan, Tashkent, Uzbekistan

THE GRID MAPPING OF THE SPECIES OF POACEAE IN KUHITANG
BOTANICAL-GEOGRAPHICAL REGION

10.40-10.50 Botagoz Aituganova

Altai Botanical Garden, Ridder, Kazakhstan

THE RESULTS OF THE INTRODUCTION OF FLORAL AND
DECORATIVE PERENNIALS OF NON-DISTRICT AND CULTURAL
FLORA IN THE ALTAI BOTANICAL GARDEN
Co-author: Satekov E.Y.

10.50-11.00 Vladislav Shevtsov

National Center of Biotechnology Republic of Kazakhstan, Astana, Kazakhstan
DEVELOPMENT OF An HERBARIUM DATABASE
Co-author: Nazarec N.A.

- 11.00-11.20 Coffee break**
- Moderators: Saule Abugalieva, Natalya Beshko**
- 11.20-11.40 Natalya Beshko**
Institute of Botany, Academy of Sciences of the Republic of Uzbekistan
 PROTECTED AREAS OF UZBEKISTAN AND CONSERVATION OF PLANT BIODIVERSITY
- 11.40-12.00 Saule Abugalieva**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 GENETIC DIVERSITY OF WILD PLANT SPECIES OF KAZAKHSTAN
 Co-authors: Almerikova Sh., Yermagambetova M., Turuspekov Y.
- 12.00-12.15 Shyryn Almerikova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 THE COMPARATIVE ASSESSMENT OF COMPLETE PLASTID SEQUENCES OF *TULIPA* L. (LILIACEAE JUSS.) SPECIES FROM KAZAKHSTAN
 Co-authors: Yermagambetova M., Ivaschenko A., Turuspekov Y., Abugalieva S.
- 12.15-12.30 Orzimat Turginov**
Institute of Botany, Academy of Sciences of the Republic of Uzbekistan, Tashkent, Uzbekistan, National University of Uzbekistan named after Mirzo Ulugbek, Tashkent, Uzbekistan
 ENDEMIC SPECIES FLORA OF UZBEKISTAN
- 12.30-12.45 Moldir Yermagambetova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 GENETIC DIVERSITY AND POPULATION STRUCTURE OF *JUNIPERUS SERAVSCHANICA* KOM. COLLECTED IN CENTRAL ASIA
 Co-authors: Almerikova Sh., Abugalieva S., Turginov O., Sultangaziev O., Turuspekov Y.
- 12.45-13.00 Saule Magzumova**
National center for biotechnology, Astana, Kazakhstan
 DNA BARCODING OF KAZAKHSTANI *BETULA* SPECIES
 Co-authors: Turzhanova A.S., Danilova A.N.
- 13.00-14.00 Lunch**
- 14.00-15.00 Poster session**
Congress hall "Atakent"
Moderators: Svetlana Kushnarenko, Stefanie Reim
- 15.00-15.20 Stefanie Reim**
Julius Kühn-Institute, Federal Research Centre for Cultivated Plants, Institute for Breeding Research on Fruit Crops, Dresden, Germany
 DIGITAL PHENOTYPING OF DISEASES IN FRUIT GENETIC RESOURCES
 Co-authors: Maß V., Richter S., Alirezazadeh P., Seidl-Schulz J., Leipnitz M., Fritzsche E., Geyer M., Wöhner T., Pflanz M.
- 15.20-15.40 Svetlana Kushnarenko**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 DEVELOPMENT OF CRYOBIOTECHNOLOGIES FOR PRESERVATION OF PLANT GERMPLASM IN KAZAKHSTAN
 Co-authors: Romadanova N.V., Rymkhanova N.K., Aralbayeva M., Manapkanova U., Rakhimbaev I.R.

- 15.40-15.50 Anna Khokhlenko**
N.I. Vavilov All-Russian Institute of Plant Genetic Resources (VIR) St. Petersburg, Russia
 ANALYSIS OF POST-CRYOGENIC POLEN REGENERATION OF PEACH (*PERSICA VULGARIS* MILL.) AND NECTARINE (*PERSICA VULGARIS* VAR. *NECTARINA* (MAX) HOLUB.) FROM THE VIR GENETIC RESOURCES COLLECTION
 Co-authors: Verzhuk V.G., Eremina O.V., Eremin V.G.
- 15.50-16.00 Zhanargul Zhanybekova**
National center for biotechnology, Astana, Kazakhstan
 MOLECULAR IDENTIFICATION AND OPTIMIZATION OF MICROPROPAGATION TECHNOLOGY OF HAWTHORN
 Co-authors: Magzumova G., Nurtaza A., Kakimzhanova A.
- 16.00-16.20 Coffee break**
- Moderators: Almagul Kakimzhanova, Monika Höfer**
- 16.20-16.40 Monika Höfer**
Julius Kühn Institute, Federal Research Centre for Cultivated Plants, Institute for Breeding Research on Fruit Crops, Dresden, Germany
MALUS ORIENTALIS FROM THE COLLECTION MISSION IN THE CAUCASUS TO THE APPLE BREEDING
 Co-authors: Peil A., Reim S., Wöhner T., Flachowsky H.
- 16.40-17.00 Almagul Kakimzhanova**
National center for biotechnology, Astana, Kazakhstan
 THE STUDY OF THE CURRENT STATUS OF VASCULAR PLANTS DIVERSITY IN THE KOSTANAY REGION
 Co-authors: Nurtaza A., Zhanybekova Zh., Perezhogin Yu.V., Borodulina O.V., Mukhtubayeva S.K., Koblanova S.A., Abileva G.A., Kurlov S.I.
- 17.00-17.15 Natalya Romadanova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 DEVELOPMENT OF BIOTECHNOLOGY FOR *EX SITU* CONSERVATION OF RARE ENDANGERED *ROSACEAE* SPECIES
 Co-authors: Zemtsova A.S., Aralbaeva M.M., Altayeva N.A., Artimovich N.A., Aleksandrova A.M., Kushnarenko S.V.
- 17.15-17.25 Aidana Nurtaza**
National center for biotechnology, Astana, Kazakhstan
 PROPAGATION AND CONSERVATION BY TISSUE CULTURE TECHNIQUE OF THE RARE SPECIES OF *RIBES JANCZEWSKII*
 Co-authors: Islamova S.S., Samatova I.N., Kakimzhanova A.A.
- 17.25-17.35 Ulzhan Manapkanova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 ESTABLISHING AN *IN VITRO* COLLECTION OF KAZAKHSTAN WILD CHERRY SPECIES
 Co-authors: Aralbayeva M.M., Rymkhanova N.K., Kushnarenko S.V.
- 17.50-18.30 Conference closing session (Congress hall "Atakent")**
- 19.00-22.00**

Day 3. Wednesday, June 5, 2024

Sessions Day

*Best Western Plus Atakent Park Hotel, 42 Timiryazev Street
Conference hall "Kok-Tobe"*

Session 2. GENETICS AND BREEDING

Moderators: Elena Salina, Awais Rasheed

- 9.00-9.20 Zahid Mahmood**
Wheat Programme, Crop Sciences Institute, National Agricultural Research Center (NARC), Park Road, Islamabad, Pakistan
SPEED BREEDING A POWERFUL TOOL TO FAST TRACK WHEAT VARIETAL DEVELOPMENT PROCESS
Co-authors: Maqsood Qamar, Muhammad Arshad, Imtiaz Hussain, Abdul Aziz, Awais Rasheed
- 9.20-9.40 Elena Salina**
Institute Cytology and Genetics SB RAS, Novosibirsk, Russia
IMPLEMENTATION OF GENETIC TECHNOLOGIES IN SOYBEAN AND WHEAT BREEDING
- 9.40-10.00 Awais Rasheed ^{1,2}**
¹*Department of Plant Sciences, Quaid-i-Azam University, Islamabad, Pakistan*
²*Chinese Academy of Agricultural Sciences (CAAS), and CIMMYT-China office*
NGS-ENABLED WHEAT GENOTYPING PLATFORMS FOR BREEDING APPLICATION
Co-authors: Xianchun Xia, Zhonghu He
- 10.00-10.10 Yuliya Genievskaya**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
GENOME-WIDE ASSOCIATION STUDY FOR KEY PLANT ADAPTATION TRAITS AND GRAIN YIELD OF SPRING BARLEY
Co-authors: Chudinov V., Abugalieva S., Turuspekoy Y.
- 10.10-10.20 Shynar Anuarbek**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
QUANTITATIVE TRAIT LOCI FOR AGRONOMIC TRAITS IN TETRAPLOID WHEAT FIELD-TESTED IN KAZAKHSTAN ENVIRONMENTS
Co-authors: Pecchioni N., Laidò G., Maccaferri M., Tuberosa R., Abugalieva S., Turuspekoy Y.
- 10.20-10.35 Madina Kumarbayeva**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
IDENTIFICATION OF PROMISING WHEAT LINES RESISTANT TO TAN SPOT (*PYRENOPHORA TRITICI-REPENTIS*) USING BREEDING AND MOLECULAR METHODS
Co-authors: Kokhmetova A., Keishilov Zh
- 10.35-10.50 Laura Tokhetova**
Kazakh Research Institute of Rice Growing named after I. Zhakhaev, Kyzylorda, Kazakhstan
INDUCED MUTAGENESIS IN THE CREATION OF BARLEY (*HORDEUM VULGARE* L.) SOURCE MATERIAL FOR PRACTICAL BREEDING
Co-author: Sultan N.Zh.

- 10.50-11.00 Aisha Taskuzhina**^{1,2}
¹ *Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
² *Al Farabi Kazakh National University, Almaty, Kazakhstan*
 GENETIC INSIGHTS INTO WILD APPLE POPULATIONS:
 A COMPREHENSIVE SNP GENOTYPING STUDY IN NORTHERN TIAN SHAN
 Co-authors: Khusnitdinova M., Pozharskiy A., Nizamdinova G., Gritsenko D.
- 11.00-11.20 Coffee break**
Moderators: Tatyana Pshenichnikova, Kanat Yermekbayev
- 11.20-11.40 Tatyana Pshenichnikova**
Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia
 THE STORY OF THE BREAD WHEAT ROOT:
 FROM AN INTROGRESSION CASE TO THE BREEDING EFFECT
 Co-authors: Smirnova O.G., Simonov A.V., Bulatov I.O.
- 11.40-12.00 Elena Dubina**
Federal Scientific Rice Centre, Krasnodar, Russia
 DEVELOPMENT AND IMPLEMENTATION OF A BREEDING SCHEME
 FOR THE CREATION OF DOMESTIC WHITE CABBAGE HYBRIDS WITH
 INCREASED RESISTANCE TO BLACK ROT, FUSARIUM WILT AND
 ALTERNARIOSIS BASED ON MAS TECHNOLOGIES
 Co-authors: Yu.A. Makukha, D.S. Simonenko
- 12.00 -12.15 Yawar Habib**
Skolkovo Institute of Science and Technology (SkolTech), Moscow, Russia
 OPTIMIZING PRE-BREEDING: INTEGRATIVE WEIGHTING OF
 PHENOTYPES AND GENOTYPES IN CORE COLLECTIONS FOR ENHANCED
 NAM AND MAGIC PARENTAL IDENTIFICATION
 Co-authors: Zamalutdinov A., Boldyrev S., Schegolkov A., Ben C., Gentzbittel L.
- 12.15-12.30 Akerke Amalova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 GENOME-WIDE ASSOCIATION STUDY OF AGRONOMIC TRAITS IN
 WINTER WHEAT COLLECTION GROWN IN KAZAKHSTAN
 Co-authors: Yessimbekova M., Ortaev A., Griffiths S., Burakhoja A., Turuspekoy Y.,
 Abugalieva S.
- 12.30-12.45 Kanat Yermekbayev**
¹ *John Innes Centre, Norwich Research Park, Norwich, UK*
² *Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
³ *Zhetysu University, Institute of Biotechnology and Ecology, Taldykorgan, Kazakhstan*
 BREAKING THE FOUNDER EFFECT CONTROLLING PLANT HEIGHT IN
 KAZAKH WHEAT GENE POOL
 Co-authors: Turuspekoy Y., Wingen L., Abugalieva S., Hall A., Orford S., Griffiths S.
- 12.45-12.55 Adeliya Khamitova**
Zhetysu University named after I. Zhansugorov, Taldykorgan, Kazakhstan
 FOUR MAPPING POPULATIONS AND THEIR GENETIC MAPS PROVIDED
 INSIGHTS INTO THE GENETICS OF ADAPTATION FOR KAZAKHSTANI
 WHEAT GERMPLASM
 Co-authors: Griffiths S., Turuspekoy Y., Shoken M., Yermekbayev K.
- 13.00-14.00 Lunch**
- 14.00-15.00 Poster session**

Moderators: Antonina Kiseleva, Alma Kokhmetova

- 15.00-15.20 Antonina Kiseleva**
Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia
FINE-TUNING WHEAT HEADING TIME THROUGH GENOME EDITING:
INVESTIGATING THE IMPACT OF TRANSCRIPTION FACTOR BINDING
SITES IN *PPD-1* GENE PROMOTER REGION
Co-authors: Timonova E.M., Berezhnaya A.A., Kolozhvari A.E., Kelbin V.N., Salina E.A.
- 15.20-15.40 Alma Kokhmetova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
MAPPING OF QTL ASSOCIATED WITH RESISTANCE TO LEAF AND
YELLOW RUST IN POPULATIONS OF RECOMBINANT INBRED WHEAT
LINES
Co-authors: Rathana N.D., Sehgal D., Kumarbayeva M., Bolatbekova A., Krishnappa G.,
Gulyaeva E., Kokhmetova As., Keishilov Zh., Bakhytulay K.
- 15.40-15.50 Akerke Maulenbay**
Research Institute for Biological Safety Problems, Guardyskiy, Kazakhstan
EXPLORING THE RELATIONSHIP BETWEEN WHEAT TRAITS AND
TOLERANCE TO RUST SPECIES AND TAN SPOT
Co-authors: Kurymbaeva N., Moldazhanova R., Rsaliyev A.
- 15.50-16.00 Assel Yessimseitova**
National Center for Biotechnology, Astana, Kazakhstan
FIRST REPORT OF *ALTERNARIA ALTERNATA* CAUSING EARLY BLIGHT OF
TOMATO (*SOLANUM LYCOPERSICUM L.*) IN KAZAKHSTAN
Co-authors: Abdrakhmanova A., Kakimzhanova A.
- 16.00-16.20 Coffee break**
- Moderators: Zahid Mahmood, Raushan Yerzhebayeva**
- 16.20-16.40 Alibek Zatybekov**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
GWAS OF SOYBEAN BREEDING COLLECTION FOR YIELD AND SEED
QUALITY GROWN IN SOUTH-EAST OF KAZAKHSTAN
Co-authors: Abugalieva S., Didorenko S., Chao Fang, Turuspekov Y.
- 16.40-16.55 Sabir Makhmadjanov**
*Agricultural Experimental Station for Cotton and Melon Growing", Atakent village,
Turkistan, Kazakhstan*
INTRODUCTION, STUDY OF NEW FOREIGN AND DOMESTIC COTTON
VARIETIES
Co-authors: Tohetova L.A., Daurenbek N., Tagaev A., Kostakov A., Aliev A.I.
- 16.55-17.10 Raushan Yerzhebayeva**
Kazakh Research Institute of Agriculture and Plant Growing, Almalyk, Kazakhstan
IDENTIFICATION OF ALLELIC DIVERSITY OF VERNALIZATION
GENES (*VRN*) IN SAMPLES OF THE WORKING COLLECTION AND
VARIETY BREEDING NURSERY OF WINTER AND SPRING BARLEY
Co-authors: Bazylova T.A., Maykotov B.N., Baymuratov A.Zh., Sariyev B.S.
- 17.10-17.20 Kamila Adilbayeva**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
EVALUATION OF POTATO GERMPLASM FOR RESISTANCE AGAINST
PATHOGENS AND PESTS: TOWARDS SUSTAINABLE AGRICULTURE
Co-authors: Moiseyev R., Nizamdinova G., Khassanov V., Azhimakhan M., Gritsenko D.

- 17.20-17.30 **Dilnur Tussipkan**
National Center for Biotechnology, Astana, Kazakhstan
 GENETIC DIVERSITY AND ASSOCIATION ANALYSIS OF SALT TOLERANCE IN ASIATIC COTTON (*GOSSYPIMUM ARBOREUM*) WITH SSR AND SNP MARKERS
 Co-author: Manabayeva Sh.
- 17.50-18.30 **Conference closing session (*Congress hall "Atakent"*)**
- 19.00-22.00

Day 3. Wednesday, June 5, 2024

Sessions Day

*Best Western Plus Atakent Park Hotel, 42 Timiryazev Street
 Conference hall "Khan Tengri"*

Session 3. Physiology, Biochemistry and Biotechnology

Moderators: Assil Nurzhanova, Anna Muratova

- 9.00-9.20 **Eugenija Kupcinskiene**
Vytautas Magnus University, Kaunas, Lithuania
 INVASIVE PLANT-ENVIRONMENT INTERACTIONS: CASE STUDY OF *IMPATIENS PARVIFLORA* DC.
 Co-authors: Marozas V., Jociene L., Krokaite E., Rekasius T., Janulioniene R., Stravinskaite K., Paulauskas A.
- 9.20-9.40 **Anna Muratova**
Institute of Biochemistry and Physiology of Plants and Microorganisms RAS, Saratov, Russia
 RHIZOSPHERE MICROBIOME OF THE BIOENERGETIC PLANT *MISCANTHUS* × *GIGANTEUS* AND ITS REMEDIATION POTENTIAL
 Co-author: Nurzhanova A.
- 9.40-10.00 **Assil Nurzhanova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 PLANT GROWTH PROMOTING (PGPR) RHIZOBACTERIA IN PHYTOREMEDIATION OF SOIL POLLUTED WITH TRACE ELEMENTS AND FUTURE PROSPECTS
 Co-authors: Mamirova A., Muratova A., Berzhanova R., Nurmagambetova A., Zhumasheva Zh., Pidlisnyuk V.
- 10.00-10.15 **Marina Grinberg**
Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod, Russia
 THE INFLUENCE OF IONIZING RADIATION IN LOW DOSES ON THE MECHANISMS OF FORMATION OF RESISTANCE TO ENVIRONMENTAL STRESS FACTORS IN PLANTS
 Co-authors: Nemtsova Y.A., Ivanova A.V., Vodeneev V.A.
- 10.15-10.30 **Alima Murtazina**
²*Department of General Immunology, Faculty of Medicine, Asfendiyarov Kazakh National Medical University, Almaty, Kazakhstan*
 WHEAT CELL CULTURE AS A SOURCE OF POLYSACCHARIDES WITH ANTICANCEROUS POTENTIAL
 Co-authors: Marchal J.A., Tarabayeva A.S., Bitanova E.Zh., McDougall G., Boulaiz H., Bishimbayeva N.K.

- 10.30-10.45 Farrukh Makhamadjonov**
John Innes Centre, Norwich, United Kingdom
 UNDERSTANDING THE CONTROL OF STARCH GRANULE SIZE IN
 WHEAT AND ITS IMPACT ON STARCH DIGESTIBILITY
- 10.45-11.00 Olessya Raizer**
National Center of Biotechnology Astana, Kazakhstan
 BIOTECHNOLOGICAL APPROACHES TO *IN VITRO* CULTURE
 INTRODUCTION OF *RHAPONTICUM CARTHAMOIDES*
 Co-author: Akinfeeva E.V.
- 11.00-11.20 Coffee break**
- Moderators: Irina Mitrofanova, Maxim Sutula**
- 11.20-11.40 Irina Mitrofanova**
N.V. Tsitsin Main Botanical Garden, Russian Academy of Sciences, Moscow, Russia
 BIOTECHNOLOGY AND GENOMIC STUDY OF FAR EASTERN
ACTINIDIA SPECIES, CULTIVARS AND FORMS
 Co-authors: Krakhmaleva I., Molkanova O., Gladysheva-Azgari M., Slobodova
 N., Sharko F., Tsygankova S.
- 11.40-11.55 Ninel Yalouskaya**
*V.F. Kuprevich Institute of Experimental Botany of the National Academy of
 Sciences of Belarus, Minsk, Republic of Belarus*
 THE IMPACT OF CHITOSAN-CAFFEIC ACID CONJUGATE WITH
BACILLUS SUBTILIS 47 ON PLANT DEFENSE AGAINST PVY UNDER
 SOIL WATER DEFICIT
 Co-authors: Kalatskaja J.N., Rybinskaya K.I., Ivanov O.A., Hileuskayad K.S.,
 Nikalaichuk V.V., Yarullina L.G., Burkhanova G.F., Zaikina E.A.
- 11.55-12.10 Ekaterina Krylova**
N.I. Vavilov All-Russian Institute of Plant Genetic Resources, Saint-Petersburg, Russia
 AIR HUMIDITY EFFECT ON PLANT ARCHITECTONICS AND GENE
 EXPRESSION: DEEP STUDY INTO UNINVESTIGATED MOLECULAR
 MECHANISMS
 Co-authors: Burlyaeva M.O., Khlestkina E.K.
- 12.10-12.30 Maxim Sutula**
National Center for Biotechnology, Astana, Kazakhstan
 PROSPECTS FOR THE PRACTICAL APPLICATION OF RNA
 INTERFERENCE FOR THE INDUCTION OF PLANT DEFENSE
 MECHANISMS
 Co-author: Manabayeva S.A.
- 12.30-12.50 Eugene Rogozhin^{1,2}**
¹*Institute of Bioorganic Chemistry Russian Academy of Sciences, Moscow, Russia*
²*All-Russian Institute for Plant Protection, Saint-Petersburg-Pushkin, Russia*
 DISCOVERY OF ANTIMICROBIAL PROTEINS AND PEPTIDES FROM
 DANDELION (*TARAXACUM OFFICINALE* WIGG.) AS A NEW TOOL FOR
 DEVELOPMENT OF BIOPESTICIDES
- 12.50-13.00 Damelya Tagimanova**
National Center for Biotechnology, Astana, Kazakhstan
 FEATURES OF SEED GERMINATION OF ENDEMIC SPECIES *TULIPA* SP.
 NORTH AND CENTRAL KAZAKHSTAN
 Co-authors: Raizer O., Nagmetova G.
- 13.00-14.00 Lunch**

- 14.00-15.00** **Poster session**
- Moderators: Roxana Savin, Zagipa Sapakhova**
- 15.00-15.20** **Roxana Savin**
Department of Agricultural and Forest Sciences and Engineering, University of Lleida – AGROTECNIO-CERCA Center, Av. Rovira Roure 191, 25198 Lleida, Spain
 PHYSIOLOGICAL BASES FOR THE TRADE-OFF BETWEEN GRAIN WEIGHT AND GRAIN NUMBER ACROSS MODERN WHEATS UNDER CONTRASTING SOIL NITROGEN CONDITIONS
 Co-authors: Kim J.W., Slafer G.A.
- 15.20-15.35** **Marina Kozuleva**
Institute of Basic Biological Problems of the Russian Academy of Sciences, Pushchino Scientific Center for Biological Research of the Russian Academy of Sciences, Pushchino, Russia
 STUDY OF THE MECHANISMS OF PHOTOSYNTHETIC CONTROL - A KEY REGULATORY PROCESS ADJUSTING THE RATE OF PHOTOSYNTHETIC ELECTRON TRANSPORT IN CHLOROPLASTS UNDER CHANGING ENVIRONMENTAL CONDITIONS
 Co-author: Vilyanen D.
- 15.35-15.50** **Vyacheslav Karlov**
All-Russia Research Institute of Agricultural Biotechnology, Moscow, Russia
 THE LONG WAY TO PVY-RESISTANT POTATO PLANTS DEVELOPMENT
 Co-authors: Nezhdanova A.V., Razhina O.L., Kolesnikova V.V., Nikonova E.Y., Lebedeva M.V., Zlobin N.E., Babakov O.V., Kamionskaya A.M., Nikonov O.S., Taranov V.V.
- 15.50-16.00** **Abay Samat**
L.N. Gumilyov Eurasian National University
 THE ROLE OF ROS SCAVENGING ENZYMES IN RESPONSE TO HIGH TEMPERATURE STRESS IN CROPS
 Co-author: Kurmanbayeva A.
- 16.00-16.20** **Coffee break**
- Moderators: Eugene Rogozhin, Malika Shamekova**
- 16.20-16.40** **Asem Tumenbayeva**
National Center for Biotechnology, Astana, Kazakhstan
 OBTAINING ASEPTIC PLANTS OF *HIPPOPHAE RHAMNOIDES* L. IN VITRO CULTURE
 Co-authors: Vdovina T.A., Khapilina O.N.
- 16.40-17.00** **Valentina Mursalieva**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 ADVENTITIOUS ROOTS CULTURE OF *ALLOCHRUSA GYPSOPHILOIDES*: SAPONINS-BEARING RARE SPECIES
 Co-author: Mukhanov T.M.
- 17.00-17.15** **Arman Tolegen^{1,2}**
¹*Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
²*Al-Farabi Kazakh National University, Almaty, Kazakhstan*
 DEVELOPMENT OF CHEMOTHERAPY TECHNIQUE FOR VIRUS ERADICATION IN FRUIT AND BERRY IN VITRO PLANTS
 Co-authors: Romadanova N.V., Kushnarenko S.V.
- 17.15-17.25** **Naira Yessenbekova**
National Center of Biotechnology, Astana, Kazakhstan
 OPTIMIZATION OF IN VITRO CULTURE KAZAKHSTAN SPECIES

RHODIOLA

Co-author: Khapilina O.N.

Dana Akhmetzhanova

Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan

17.25-17.40 PHYTOREMEDIATION OF CONTAMINATED SOILS BY INDUSTRIAL EMISSIONS IN ALMATY CITY

Co-author: Khamitova K.

Murat Otyunshiyev^{1,2}

¹*Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*

17.40-17.55 ²*Almaty Technological University, Almaty, Kazakhstan*

TECHNOLOGY FOR PROCESSING BAST FIBERS ON WOOLEN EQUIPMENT

Co-authors: Assanova A., Niyazbekov B., Abilda Zh., Toishimanov M., Shamekova M.

17.50-18.40 **Conference closing session (*Congress hall "Atakent"*)**

19.00-22.00

Day 3. Wednesday, June 5, 2024

Sessions Day

*Best Western Plus Atakent Park Hotel, 42 Timiryazev Street
Conference hall "Manshuk"*

Session 4. Cellular and Genetic Engineering &

Session 5. Genomics, Proteomics, and Bioinformatics

Moderators: Shuga Manabayeva, Vasiliy Taranov

9.00-9.20 **Shuga Manabayeva**

National Center for Biotechnology

UTILIZATION OF NEW TECHNOLOGIES IN ENHANCING CROP QUALITY, PLANT MOLECULAR FARMING, AND SAFEGUARDING BIODIVERSITY

9.20-9.40 **Vasiliy Taranov**

All-Russia Research Institute of Agricultural Biotechnology

SOLANUM TUBEROSUM L. GENOME EDITING AS AN INSTRUMENT FOR THE CROP IMPROVEMENT

Co-authors: Lebedeva M., Karlov V., Komakhin R., Konovalova L., Ivanova L., M. Volkov, Monakhova, Y., Zlobin N., Klepikova A., Babakov A.

9.40-10.00 **Andrej Frolov**

K.A. Timiryazev Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia

TOOLBOX OF PLANT PROTEOMICS – CURRENT STATE AND PERSPECTIVES

10.00-10.15 **Denis Omelchenko**

Institute for Information Transmission Problems

HAIRY ROOTS INDUCTION AND REGENERATION OF TRANSGENIC NON-MODEL PLANTS FAGOPYRUM ESCULENTUM

Co-authors: Glagoleva E., Omelchenko L., Abdulkina L., Logacheva M.

- 10.15-10.30** **Alexandr Pozharskiy**
¹*Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
²*al-Farabi Kazakh National University, Almaty, Kazakhstan*
 SEQUENCE VARIATION OF *SLMLO* GENES IN TOMATO
 Co-authors: Kostyukova V.S., Gritsenko D.A.
- 10.30-10.45** **Aleksei Zamalutdinov**
Skolkovo Institute of Science and Technology, Moscow, Russia
 WHOLE GENOME-BASED EVALUATION OF VICIA SP GENETIC DIVERSITY
 Co-authors: Boldyrev S.V., Maalouf F., Rubiales D., Vaz Patto M.C., Fustec J., Gentzbittel L., Ben C.
- 10.45-11.00** **Anastasiya Kapytina**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 HIGH-THROUGHPUT SEQUENCING AS SENSITIVE APPROACH FOR THE DETECTION VIRUSES AND VIROIDS IN POTATOES
 Co-authors: Mendybayeva A., Kenzhebekova R., Gritsenko D.A.
- 11.00-11.20** **Coffee break**
Moderators: Andrej Frolov, Alibek Zatybekov, Dilyara Gritsenko
- 11.20-11.40** **Dilyara Gritsenko**
¹*Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
²*al-Farabi Kazakh National University, Almaty, Kazakhstan*
 METAGENOMIC ANALYSIS OF FRUIT TREES IN KAZAKHSTAN
 Co-authors: Taskuzhina A., Kerimbek N., Nizamdinova G., Pozharskiy A.
- 11.40-11.55** **Elena Lukasheva**
Saint-Petersburg State University, Saint-Petersburg, Russia
 ADDRESSING S-NITROSYLATION IN WHEAT ROOTS: BOTTOM-UP PROTEOMIC APPROACH
 Co-authors: Mazina A., Gorbach D., Frolova N., Shumilina J., Minibaeva F., Frolov A.
- 11.55-12.15** **Nadezhda Frolova**
K.A. Timiryazev Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia
St. Petersburg State University, St. Petersburg, Russia
 PLANT METABOLOME STUDY: RECENT ANALYTICAL TOOLS AND TECHNIQUES
 Co-authors: Orlova A.A., Erofeeva N.O., Bilova T.E., Frolov A.A.
- 12.15-12.30** **Vladislav Shevtsov**
Kazakh Agrotechnical University named after S. Seifullin, Astana, Kazakhstan
 PIPELINE FOR PROCESSING GENOTYPING DATA FOR BACTERIAL STRAINS
 Co-authors: Ismailova A.A.
- 12.30-12.40** **Roza Kenzhebekova**
¹*Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
²*al-Farabi Kazakh National University, Almaty, Kazakhstan*
 LARGE-SCALE WHOLE-GENOME SEQUENCING OF POTATO VIRUSES
 Co-authors: Mendybayeva A.S.¹, Gritsenko D.A.¹
- 12.40-12.50** **Valeriya Kostyukova**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 THE PRELIMINARY ASSESSMENT OF SUGAR BEET FIELDS FOR THE PRESENCE OF VIRUSES USING OXFORD NANOPORE TECHNOLOGY

Co-authors: Moissejev R., Pozharskiy A., Mendybayeva A., Gritsenko D.

12.50-13.00 Nazym Kerimbek

¹ *Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*

² *Al-Farabi Kazakh National University, Almaty, Kazakhstan*

UNVEILING THE VIROME OF APPLE TREES IN SOUTH KAZAKHSTAN

Co-authors: Mendybayeva A., Nizamdinova G., Taskuzhina A., Khusnitdinova M., Gritsenko D.

13.00-14.00 Lunch

14.00-15.00 Poster session

15.00-18.00 Moderator: Dilyara Gritsenko

Workshop: OXFORD NANOPORE SEQUENCING: NEW OPPORTUNITIES FOR PLANT GENOMICS AND PHYTOPATHOLOGY

17.50-18.40 Conference closing session (*Congress hall "Atakent"*)

19.00-22.00

Day 4. Thursday, June 6, 2024

City tours, including Medeo and Shymbulak

Round tables (based on proposals)

Workshops (based on proposals)

ICPBB 2024 (Almaty, Kazakhstan, 2024) - POSTER SESSIONS

Session 1. Genetic Resources and Biodiversity

- P1-1 Almerekova S.¹, Yermagambetova M.¹, Osmonali B.², Vesselova P.², Abugalieva S.¹, Turuspekov Y.¹**
¹ Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
² Institute of Botany and Phytointroduction, Almaty, Kazakhstan
COMPARATIVE CHARACTERIZATION OF THE PLASTID GENOME SEQUENCES OF FOUR CAROXYLON SPECIES FROM KAZAKHSTAN
- P1-2 Altayeva N.A., Aralbayeva M.M., Zemtsova A.S., Kushnarenko S.V., Romadanova N.V.**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
STUDY OF BIODIVERSITY OF THE RARE ENDANGERED SPECIES *PRUNUS ARMENIACA* L. AND *EX SITU* CONSERVATION OF GENOTYPES WITH VALUABLE ECONOMIC AND BIOLOGICAL TRAITS
- P1-3 Aralbayeva M.M.¹, Rymkhanova N.K.¹, Manapkanova U.A.¹, Amirova A.K.², Kushnarenko S.V.¹**
¹ Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
² Al Farabi Kazakh National University, Almaty, Kazakhstan
DEVELOPMENT OF MICROPROPAGATION AND CRYOPRESERVATION TECHNIQUES FOR CONSERVATION OF RARE ENDANGERED SPECIES *CORYLUS AVELLANA* L.
- P1-4 Bakhytuly K., Kokhmetova A., Kumarbayeva M., Keishilov Zh., Kokhmetova A., Mukhametzhanov K.**
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
MONITORING THE SPREAD OF *JUGLANS REGIA* L. IN THE SOUTHERN AND SOUTHEASTERN REGIONS OF KAZAKHSTAN AND MORPHOLOGICAL STUDY OF WALNUT FRUITS
- P1-5 Beshko N.Yu., Turginov O.T.**
Institute of Botany, Tashkent, Uzbekistan
INVENTORY AND MAPPING OF THE FLORA OF UZBEKISTAN AND MAINTAINING THE STATE CADASTER
- P1-6 Dairbekova Z.^{1,2}, Kolchenko M.¹, Taskuzhina A.^{1,2}, Kostyukova V.¹, Gritsenko D.¹**
¹ Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
² al-Farabi Kazakh National University, Almaty, Kazakhstan
ASSESSMENT OF THE GENETIC DIVERSITY OF *LYMANTRIA DISPAR* USING RAPD MARKERS
- P1-7 Gavrilova O.P., Gagkaeva T.Yu.**
All-Russian Institute of Plant Protection (VIZR), St. Petersburg, Russia
BRACHYPODIUM DISTACHYON AS A MODEL PLANT FOR ASSAY THE PATHOGENICITY OF *FUSARIUM* FUNGI PRODUCING T-2/HT-2 TOXINS TO SMALL GRAIN CEREALS
- P1-8 Gubaidullin N., Manabayeva S.**
National Center of Biotechnology, Astana, Kazakhstan
PRESERVATION POTENTIAL: EXPLORING CRYOPRESERVATION TECHNIQUES FOR *EUONYMUS KOOPMANNII*
- P1-9 Imirsinova A.¹, Kurbanova M.², Rustamov A.³**
¹ National University of Uzbekistan. Tashkent, Uzbekistan
² Andijan State University. Andijan, Uzbekistan
³ National University of Uzbekistan. Tashkent, Uzbekistan
RECOVERY OF REPRESENTATIVES OF THE GENUS *AEGILOPS* L.

- P1-10 Khusnitdinova M.¹**, Taskuzhina A.^{1,2}, Kerimbek N.^{1,2}, Pozharskiy A.¹, Nizamdinova G.¹, Gritsenko D.¹
¹ *Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan*
² *al-Farabi Kazakh National University, Almaty, Kazakhstan*
 ASSESSING THE RESPONSE OF WILD TREES IN THE TIAN SHAN REGION TO CLIMATE CHANGE OVER THE PAST TWO DECADES
- P1-11 Kukharchyk N.**, Kolbanova E., Bazhydai T.
Institute for Fruit Growing, Minsk Region, Belarus
 DETECTION OF ACLSV AND ASPV IN SEEDS OF POME FRUIT CROPS AND ASSESSMENT OF THE LIKELIHOOD OF VIRUS TRANSMISSION BY SEEDS
- P1-12 Makhambetov A.**, Mendybayeva A., Nizamdinova G., Gritsenko D.
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 METAGENOMIC ANALYSIS OF APPLE AND HAWTHORN POPULATIONS
- P1-13 Raissova N.**, Shamekova M., Sapakhova Z., Zhambakin K.
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 SEED POTATO QUALITY CONTROL - INSPECTION AND CERTIFICATION
- P1-14 Rakhimzhanova A.O.**, Manabayeva S.A.
National Center for Biotechnology, Astana, Kazakhstan
 FEATURES OF *IN VITRO* PROPAGATION OF RARE AND ENDANGERED TULIP SPECIES IN KAZAKHSTAN
- P1-15 Ramazanov M.**, Tussipkan D., Manabayeva S.A.
National Center for Biotechnology, Astana, Kazakhstan
 DNA BARCODING AND PHYLOGENETIC ANALYSIS OF *BRASSICACEAE* BURNETT SPECIES USING *RBCL* AND *MATK* MARKER GENES
- P1-16 Razhina O.L.¹**, Chernyaev K.A.¹, Zlobin N.E.¹, Jalilov F.S.-U.², Ignatov A.N.³, Taranov V.V.¹
¹ *All-Russia Research Institute of Agricultural Biotechnology, Moscow, Russia*
² *Russian State Agrarian University - Moscow Timiryazev Agricultural Academy, Moscow, Russia*
³ *Peoples' Friendship University of Russia named after Patrice Lumumba, Moscow, Russia*
 STUDY OF TAL-EFFECTORS IN *XANTHOMONAS CAMPESTRIS* PV. *CAMPESTRIS* AS VIRULENT FACTORS FOR *BRÁSSICA OLERÁCEA*
- P1-17 Terletskaya N.V.**, Khapilina O.N., Erbay M., Turzhanova A.S.
¹ *Institute of Genetics and Physiology, Almaty, Kazakhstan*
² *National Center for Biotechnology, Astana, Kazakhstan*
 GENETIC ADAPTATION STRATEGIES OF *RHODIOLA LINEARIFOLIA* PLANTS FROM VARIOUS ECOLOGICAL AND GEOGRAPHICAL POPULATIONS
- P1-18 Vdovina T.A.**, Lagus O.A., Danilova A.N., Isakova E.A.
Altai Botanical Garden, Kazakhstan, Ridder, Kazakhstan
 GENE POOL OF WILD FRUIT AND BERRY PLANTS IN THE ALTAI BOTANICAL GARDEN
- P1-19 Yefremova Yu.**, Malakhova N., Khanseitova A., Urazayeva M.
M. Aitkhozhin Institute of Molecular Biology and Biochemistry, Almaty, Kazakhstan
 GENETIC DIVERSITY OF VIRUSES INFECTING STRAWBERRIES IN THE SOUTHEAST OF KAZAKHSTAN
- P1-20 Yelchaninov M.I.**, Nizamdinova G., Gritsenko D.
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
 ESTABLISHMENT OF PLANT BACTERIA AND FUNGI COLLECTION
- P1-21 Yessimbekova M.A.**, Suleimenova M.Sh., Mukin K.B.
Kazakh Research Institute of Agriculture and Plant Growing, Almalyk, Kazakhstan
 EVALUATING PHYSIOLOGICAL TRAITS IN WHEAT GENETIC RESOURCES ASSOCIATED WITH HEAT TOLERANCE AND DROUGHT RESISTANCE
- P1-22 Zhumabay N.B.**, Bekkuzhina S.S., Sutula M.Y., Manabayeva S.A.
National Center for Biotechnology, Astana, Kazakhstan
 IDENTIFICATION OF PLANTS OF THE *RANUNCULACEAE* FAMILY BY DNA BARCODING

Session 2. GENETICS AND BREEDING

- P2-1** **Abduakassov A.**¹, Zahid M.², Baimyrzayev K.¹, Yermekbayev K.¹.
¹ Zhetysu University, Institute of Biotechnology and Ecology, Taldykorgan, Kazakhstan,
² National Agricultural Research Centre, Islamabad, Pakistan
ESTABLISHMENT OF THE FIRST “SPEED BREEDING” FACILITY FOR THE
USE OF WHEAT BREEDING IN KAZAKHSTAN: PERSPECTIVES AND
PROSPECTIVES
- P2-2** **Abylkairova M.**, Dyussibayeva E., Rysbekova A.
S. Seifullin Kazakh Agrotechnical Research University, Astana, Kazakhstan
EVALUATION OF PROSO MILLET (*PANICUM MILIACEUM* L.) GERMPLASM
ON AGRONOMIC TRAITS UNDER CONDITIONS OF DRY-STEPPE ZONE OF
KAZAKHSTAN
- P2-3** **Amalova A.**¹, Babkenov A.², Philp C.³, Griffiths S.³, Abugalieva S.¹, Turuspekoy¹
¹ Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
² A.I. Barayev Research and Production Centre of Grain Farming, Shortandy, Akmola Region, Kazakhstan
³ John Innes Centre, Norwich, United Kingdom
GENOME-WIDE ASSOCIATION STUDY OF PLANT ADAPTATION TRAITS IN
NESTED ASSOCIATION MAPPING POPULATION GROWN IN KAZAKHSTAN
- P2-4** **Anuarbek S.**¹, Genievskaya Y.¹, Zatybekov A.¹, Pecchioni N.², Laidò G.², Rsaliyev A.³,
Chudinov V.⁴, Turuspekoy Y.¹, Abugalieva S.¹
¹ Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
² Research Centre for Cereal and Industrial Crops, Foggia, Italy
³ Research Institute of Biological Safety Problems, Gvardeisky, Zhambyl Region, Kazakhstan
⁴ Karabalyk Agricultural Experimental Station, Nauchnoe, Kostanai Region, Kazakhstan
GENOME-WIDE ASSOCIATION STUDY OF LEAF RUST AND STEM RUST
SEEDLING AND ADULT RESISTANCES IN TETRAPLOID WHEAT
ACCESSIONS HARVESTED IN KAZAKHSTAN
- P2-5** **Aytasheva Z.**, Zhumabayeva B., Smekenov I., Lebedeva L., Dauletbayeva S.,
Chunetova Zh.
al-Farabi Kazakh National University, Almaty, Kazakhstan
NEW FAD OF THE KAZAKH UNIVERSITY BEAN COLLECTION:
INTRODUCTION OF SNAPS
- P2-6** **Bakhytuly K.**, Mukhametzhanov K.
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
GENETIC AND PHYTOPATHOLOGICAL STUDY OF THE RESISTANCE OF
WINTER WHEAT VARIETIES TO LEAF RUST *PUCCINIA TRITICINA*
- P2-7** **Bolatbekova A.**, Kokhmetova A, Kumarbayeva M., Keishilov Zh., Kokhmetova As.
Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan.
SEARCH FOR CARRIERS OF RESISTANCE TO SEPTORIA IN THE
COLLECTION OF WHEAT VARIETIES AND PROMISING LINES
- P2-8** **Daurova A.**¹, Oshergina I.², Daurov D.¹, Sapakhova Z.¹, Zhapar K.¹, Shamekova M.¹,
Zhambakin K.¹
¹ Institute of Plant Biology and Biotechnology, Almaty, Kazakhstan
² A.I. Barayev Research and Production Center for Grain Farming, Shortandy, Kazakhstan
STUDY OF BREEDING-VALUABLE TRAITS AND SNP DISCOVERY IN
RAPESEED MUTANT LINES
- P2-9** **Didorenko S.V.**, Yerzhebayeva R.S., Amangeldiyeva A., Kassenov R.Zh.
Kazakh Research Institute of Agriculture and Plant Growing, Almalyk, Kazakhstan
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